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MEGASONIC TRANSDUCER WITH FOCUSED ENERGY RESONATOR

ABSTRACT

A transducer comprised of a resonator and a piezoelectric crystal for cleaning single items such as semiconductor wafers and flat panel displays. The resonator is an elongated piece of material having a cross section that is trapezoidal in shape. The parallel sides of the trapezoid form the top and bottom ends of the resonator and the nonparallel sides of the trapezoid focus the acoustic energy on the bottom end of the resonator.

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